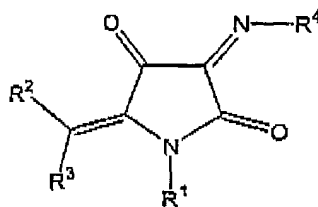


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**In the Claims**

1. (Original) A substituted pyrrolidine-2,3,4-trione compound of formula I



I

wherein

R<sup>1</sup> represents H, OR<sup>8</sup>, COR<sup>5</sup>, CSR<sup>5</sup>, NR<sup>6</sup>R<sup>7</sup>, COOR<sup>5</sup>, CONR<sup>6</sup>R<sup>7</sup>, CSNR<sup>6</sup>R<sup>7</sup>, a C<sub>1-10</sub>-alkyl group or an unsubstituted phenyl group,

R<sup>2</sup>, R<sup>3</sup>, which are identical or different, represent H, F, Cl, Br, CF<sub>3</sub>, OR<sup>8</sup>, SR<sup>8</sup>, a C<sub>1-10</sub>-alkyl, an aryl or a heteroaryl group or represent an aryl group bonded via a C<sub>1-6</sub>-alkylene group,

R<sup>4</sup> represents H, OH, OR<sup>8</sup>, SR<sup>8</sup>, COR<sup>5</sup>, COOR<sup>5</sup>, COCOR<sup>5</sup>, CONR<sup>6</sup>R<sup>7</sup>, CSNR<sup>6</sup>R<sup>7</sup> or a C<sub>1-10</sub>-alkyl group,

R<sup>5</sup> represents H or a C<sub>1-10</sub>-alkyl group,

R<sup>6</sup>, R<sup>7</sup>, which are identical or different, represent H, OR<sup>8</sup>, COR<sup>5</sup>, COOR<sup>5</sup> or a C<sub>1-10</sub>-alkyl group, and

R<sup>8</sup> represents a C<sub>1-10</sub>-alkyl group,

in the form of their racemates, enantiomers, diastereomers or a corresponding physiologically tolerated salt.

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2. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>1</sup> represents a C<sub>1-6</sub>-alkyl group.

3. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>2</sup> or R<sup>3</sup> represents, or R<sup>2</sup> and R<sup>3</sup> both represent a C<sub>1-6</sub>-alkyl group.

4. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>2</sup> or R<sup>3</sup> represents, or R<sup>2</sup> and R<sup>3</sup> both represent an aryl group bonded via a C<sub>1-3</sub>-alkylene group.

5. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>4</sup> represents OH.

6. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>4</sup> represents OR<sup>5</sup>.

7. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>4</sup> represents a C<sub>1-6</sub>-alkyl group.

8. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>5</sup> represents a C<sub>1-6</sub>-alkyl group.

9. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>6</sup>, or R<sup>7</sup> represents, or R<sup>6</sup> and R<sup>7</sup> both represent, a C<sub>1-6</sub>-alkyl group.

10. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, wherein R<sup>8</sup> represents a C<sub>1-6</sub>-alkyl group.

11. (Original) A substituted pyrrolidine-2,3,4-trione compound according to claim 1, selected from the group consisting of:

5-(methoxyphenylmethylene)-pyrrolidine-2,3,4-trione 3-oxime;

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5-(bromophenylmethylene)-pyrrolidine-2,3,4-trione 3-oxime;

5-benzylidene-pyrrolidine-2,3,4-trione 3-oxime;

5-(2-chlorobenzylidene)-pyrrolidine-2,3,4-trione 3-oxime;

5-(4-chlorobenzylidene)-pyrrolidine-2,3,4-trione 3-oxime;

5-(2,3-dichlorobenzylidene)-pyrrolidine-2,3,4-trione 3-oxime;

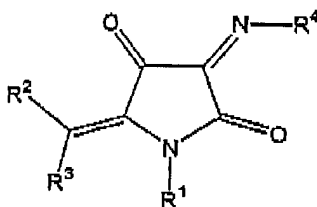
5-(2,4-dichlorobenzylidene)-pyrrolidine-2,3,4-trione 3-oxime;

5-(2,6-dichlorobenzylidene)-pyrrolidine-2,3,4-trione 3-oxime;

and

5-(3-chlorobenzylidene)-pyrrolidine-2,3,4-trione 3-oxime.

12. (Original) A method for the preparation of a substituted pyrrolidine-2,3,4-trione compound of formula I,



wherein

R<sup>1</sup> represents H, OR<sup>5</sup>, COR<sup>5</sup>, CSR<sup>5</sup>, NR<sup>6</sup>R<sup>7</sup>, COOR<sup>5</sup>, CONR<sup>6</sup>R<sup>7</sup>, CSNR<sup>6</sup>R<sup>7</sup>, a C<sub>1-10</sub>-alkyl group or an unsubstituted phenyl group,

R<sup>2</sup>, R<sup>3</sup>, which are identical or different, represent H, F, Cl, Br, CF<sub>3</sub>, OR<sup>8</sup>, SR<sup>8</sup>, a C<sub>1-10</sub>-alkyl, an aryl or a heteroaryl group or represent an aryl group bonded via a C<sub>1-6</sub>-alkylene group,

R<sup>4</sup> represents H,

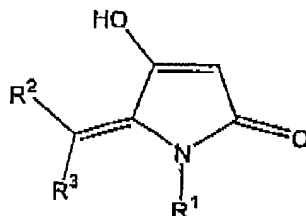
R<sup>5</sup> represents H or a C<sub>1-10</sub>-alkyl group,

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$R^6, R^7$ , which are identical or different, represent H,  $OR^8$ ,  $COR^5$ ,  $COOR^5$  or a  $C_{1-10}$ -alkyl group, and

$R^8$  represents a  $C_{1-10}$ -alkyl group,

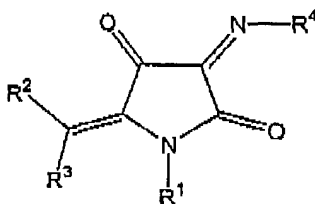
the method comprising reacting a tetramic acid of formula II



II

wherein  $R^1$  to  $R^8$  have the meaning according to formula I, with an aqueous solution of sodium nitrite in an ice-cooled solution.

13. (Original) A method for the preparation of a substituted pyrrolidine-2,8,4-trione compound of formula I,



I

wherein

$R^1$  represents H,  $OR^8$ ,  $COR^5$ ,  $CSR^5$ ,  $NR^6R^7$ ,  $COOR^5$ ,  $CONR^6R^7$ ,  $CSNR^6R^7$ , a  $C_{1-10}$ -alkyl group or an unsubstituted phenyl group,

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$R^2$ ,  $R^3$ , which are identical or different, represent H, F, Cl, Br,  $CF_3$ ,  $OR^6$ ,  $SR^6$ , a  $C_{1-10}$ -alkyl, an aryl or a heteroaryl group or represent an aryl group bonded via a  $C_{1-6}$ -alkylene group,

$R^4$  represents  $OR^6$ ,

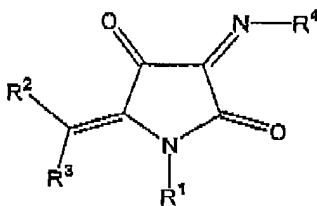
$R^5$  represents H or a  $C_{1-10}$ -alkyl group,

$R^6$ ,  $R^7$ , which are identical or different, represent H,  $OR^6$ ,  $COR^5$ ,  $COOR^5$  or a  $C_{1-10}$ -alkyl group, and

$R^8$  represents a  $C_{1-10}$ -alkyl group,

the method comprising reacting a compound of formula I wherein  $R^4$  represents OH, with a  $C_{1-10}$ -alkyl halide in absolute solvents at low temperatures in the presence of strong bases to give rise to a compound of formula I wherein  $R^4$  represents  $OR^6$ .

14. (Original) A method for the preparation of a substituted pyrrolidine-2,3,4-trione compound of the formula I,



I

wherein

$R^1$  represents H,  $OR^6$ ,  $COR^5$ ,  $OSR^6$ ,  $NR^6R^7$ ,  $COOR^5$ ,  $CONR^6R^7$ ,  $CSNR^6R^7$ , a  $C_{1-10}$ -alkyl group or an unsubstituted phenyl group,

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$R^2$ ,  $R^3$ , which are identical or different, represent H, F, Cl, Br,  $CF_3$ ,  $OR^8$ ,  $SR^8$ , a  $C_{1-10}$ -alkyl, an aryl or a heteroaryl group or represent an aryl group bonded via a  $C_{1-6}$ -alkylene group,

$R^4$  represents  $COR^5$  or  $COOR^5$ ,

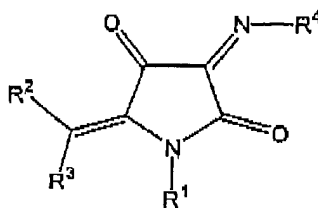
$R^5$  represents H or a  $C_{1-10}$ -alkyl group,

$R^6$ ,  $R^7$ , which are identical or different, represent H,  $OR^8$ ,  $COR^5$ ,  $COOR^5$  or a  $C_{1-10}$ -alkyl group, and

$R^8$  represents a  $C_{1-10}$ -alkyl group,

the method comprising reacting a compound of formula I wherein  $R^4$  represents  $OR^8$ , with an acid chloride of the formula  $R^5-(C=O)-Cl$  or an acid bromide of the formula  $R^5-(C=O)-Br$  or a chloroformic acid ester of the formula  $Cl-(C=O)-O-R^5$  or a fluoroformic acid ester of the formula  $F-(C=O)-O-R^5$ , or with an open-chain carbonate of the formula  $R^5-O-(C=O)-O-R^5$ , or with a correspondingly substituted cyclic carbonate, wherein in each case  $R^5$  represents H or a  $C_{1-10}$ -alkyl group, in an absolute solvent to give rise to a compound of formula I wherein  $R^4$  represents  $COR^5$  or  $COOR^5$ .

15. (Original) A method for the preparation of a substituted pyrrolidine-2,3,4-trione compound of formula I



wherein

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R<sup>1</sup> represents H, OR<sup>8</sup>, COR<sup>5</sup>, CSR<sup>5</sup>, NR<sup>6</sup>R<sup>7</sup>, COOR<sup>5</sup>, CONR<sup>6</sup>R<sup>7</sup>, CSNR<sup>6</sup>R<sup>7</sup>, a C<sub>1-10</sub>-alkyl group or an unsubstituted phenyl group,

R<sup>2</sup>, R<sup>3</sup>, which are identical or different, represent H, F, Cl, Br, CF<sub>3</sub>, OR<sup>8</sup>, SR<sup>8</sup>, a C<sub>1-10</sub>-alkyl, an aryl or a heteroaryl group or represent an aryl group bonded via a C<sub>1-6</sub>-alkylene group,

R<sup>4</sup> represents CONR<sup>6</sup>R<sup>7</sup> or CSNR<sup>6</sup>R<sup>7</sup>,

R<sup>5</sup> represents H or a C<sub>1-10</sub>-alkyl group,

R<sup>6</sup>, R<sup>7</sup>, which are identical or different, represent H, OR<sup>8</sup>, COR<sup>5</sup>, COOR<sup>5</sup> or a C<sub>1-10</sub>-alkyl group, and

R<sup>8</sup> represents a C<sub>1-10</sub>-alkyl group,

the method comprising reacting a compound of formula I wherein R<sup>4</sup> represents OH with aliphatic isocyanates or isothiocyanates at low temperatures in aprotic polar solvents to give rise to a compound of formula I wherein R<sup>4</sup> represents CONR<sup>6</sup>R<sup>7</sup> or CSNR<sup>6</sup>R<sup>7</sup>, and R<sup>6</sup> or R<sup>7</sup> denotes H.

16. (Original) A method according to claim 12, wherein the tetramic acid of formula II is reacted with an aqueous solution of sodium nitrite in an ice-cooled solution of glacial acetic acid.

17. (Original) A method according to claim 12, further comprising purifying the compound of formula I wherein R<sup>4</sup> represents OH by recrystallization.

18. (Currently amended) A method ~~of~~ according to Claim 17, wherein the purifying is by recrystallization from ethanol.

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19. (Original) A method according to claim 13, wherein the compound of formula I wherein  $R^4$  represents OH is reacted under an inert gas atmosphere.

20. (Original) A method according to claim 13, wherein the compound of formula I wherein  $R^4$  represents OH is reacted in open-chain or cyclic ethers, or both.

21. (Original) A method according to claim 13, wherein the compound of formula I wherein  $R^4$  represents OH is reacted in the presence of one or more of alkali metal hydroxides, alkaline earth metal hydroxides and organometallic bases.

22. (Original) A method according to claim 13, wherein the compound of formula I wherein  $R^4$  represents OH is reacted with  $C_{1-6}$ -alkyl halides.

23. (Original) A method according to claim 14, wherein the compound of formula I wherein  $R^4$  represents  $OR^8$  is reacted under an inert gas atmosphere.

24. (Original) A method according to claim 14, wherein the compound of formula I wherein  $R^4$  represents  $OR^8$  is reacted in open-chain or cyclic ethers, or both.

25. (Original) A method according to claim 14, wherein the cyclic carbonate employed contains 5 or 6 atoms in the ring.

26. (Currently amended) A pharmaceutical composition comprising a substituted ~~a~~ pyrrolidine-2,3,4-trione compound according to claim 1, or a



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corresponding pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

27. (Currently amended) A method for treatment of one or more of pain, inflammatory reactions, allergic reactions, ~~depressions, drug abuse, alcohol abuse,~~ gastritis, diarrhoea, urinary incontinence, cardiovascular diseases, respiratory tract diseases, coughing, ~~mental illnesses,~~ epilepsy, schizophrenia, ~~Alzheimer's disease,~~ Huntington's disease, Parkinson's disease, cerebral ischaemias, cerebral infarctions, psychoses caused by increased amino acid levels, apoplexies, cerebral oedemas, hypoxia, anoxia, ~~AIDS dementia,~~ encephalomyelitis, Tourette's syndrome, and perinatal asphyxia ~~and anoxiolytic,~~ comprising administering to a patient in need thereof an effective amount of the pharmaceutical composition of claim 26.

28. (Currently amended) A method according to Claim 27, wherein the method is for the treatment of one or more of pain, inflammatory reactions, allergic reactions, ~~depressions, drug abuse, alcohol abuse,~~ gastritis, diarrhoea, urinary incontinence, cardiovascular diseases, respiratory tract diseases, coughing ~~, mental illnesses~~ and epilepsy.

29. (Currently amended) A method according to claim 27, wherein the method is for treatment or prophylaxis of schizophrenia, ~~Alzheimer's disease,~~ Huntington's disease, Parkinson's disease, cerebral ischaemias, cerebral infarctions, psychoses caused by increased amino acid levels, apoplexies, cerebral oedemas, hypoxia, anoxia, ~~AIDS dementia,~~ encephalomyelitis, Tourette's syndrome, or perinatal asphyxia ~~or for anoxiolytic,~~ comprising administering the pharmaceutical composition of claim 25 to a patient in need thereof.